

# Work Order ID 71575

Wednesday, July 06, 2011 1:20:39 PM



Page 1

Item ID: D3407-043

Accept



Setup Start



Revision ID:

Item Name: Tow Ring

Stop



Start Date: 7/6/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 7/20/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

CY

Date: 11/07/06 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3407

Rev E

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld D3407-3/-5 using welding rod TIG174 as per Dwg D3407 & QSI  
004 A/R TIG174 ROD Batch: 11/01/02

EL 11-9-21 (X12)

110

0.00



QC9- Inspect visual per QSI004- Fusion Welds

QC

Memo

0.00

Quality Control

EL 11-09-21

(X12)

120

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

8/10/12

(X12)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_






NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



**NOTE:** Date & initial all entries


**Work Order ID 71575**

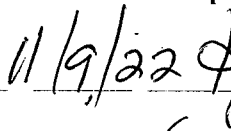
Page 3

Wednesday, July 06, 2011 1:20:39 PM

Item ID: D3407-043      Accept            Setup      Start        
Revision ID:      Stop        
Item Name: Tow Ring  
Start Date: 7/6/2011      Start Qty: 10.00            Cust Item ID:  
Required Date: 7/20/2011      Req'd Qty: 10.00            Customer:  
Reference:

Approvals:      Process Plan: \_\_\_\_\_      Date: \_\_\_\_\_      Tooling: \_\_\_\_\_      Date: \_\_\_\_\_      Run      Start        
QC: \_\_\_\_\_      Date: \_\_\_\_\_      SPC (Y/N): \_\_\_\_\_      Date: \_\_\_\_\_      Stop      

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.00							

11/9/22   
mf  
11-09-27

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 1

Work Order ID: 71575

Parent Item: D3407-043

Parent Item Name: Tow Ring



Start Date: 7/6/2011

Required Date: 7/20/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 05.10.14 New issue KJ/EC  
IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3407-3 Stem		Manufactured	No			100	Each	4.0000	1	10			
71880x9 <del>72116x10</del>													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				WA			4						
					66394		4						
D3407-5 Ring		Manufactured	No			100	Each	3.0000	1	10			
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				WA030			3						
					69742		3						

~~72146x10~~

72146x12

~~EL 11-8-17~~  
EL 11-9-20

~~EL 11-8-17~~  
EL 11-9-20

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

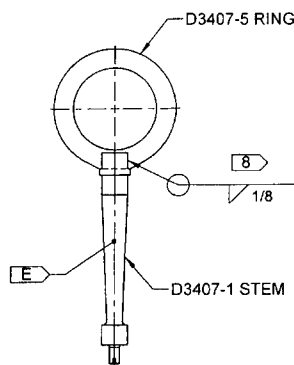
**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR:** Yes No **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

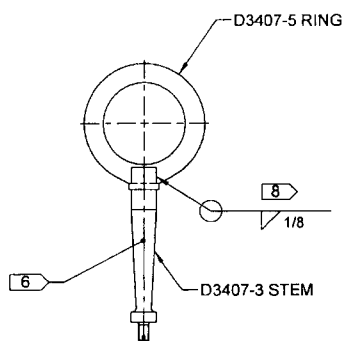
**NOTE:** Date & initial all entries



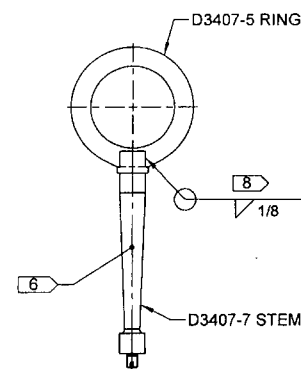
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



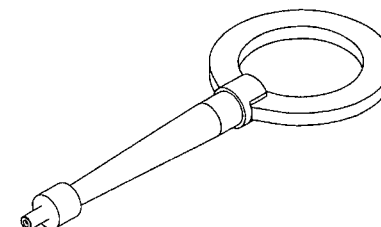
**D3407-041 TOW RING**



**D3407-043 TOW RING**



**D3407-045 TOW RING**



**RELEASED**

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NO. 71575

*C2107106*

**NOTES:**

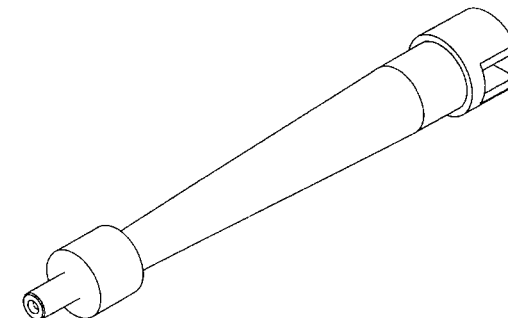
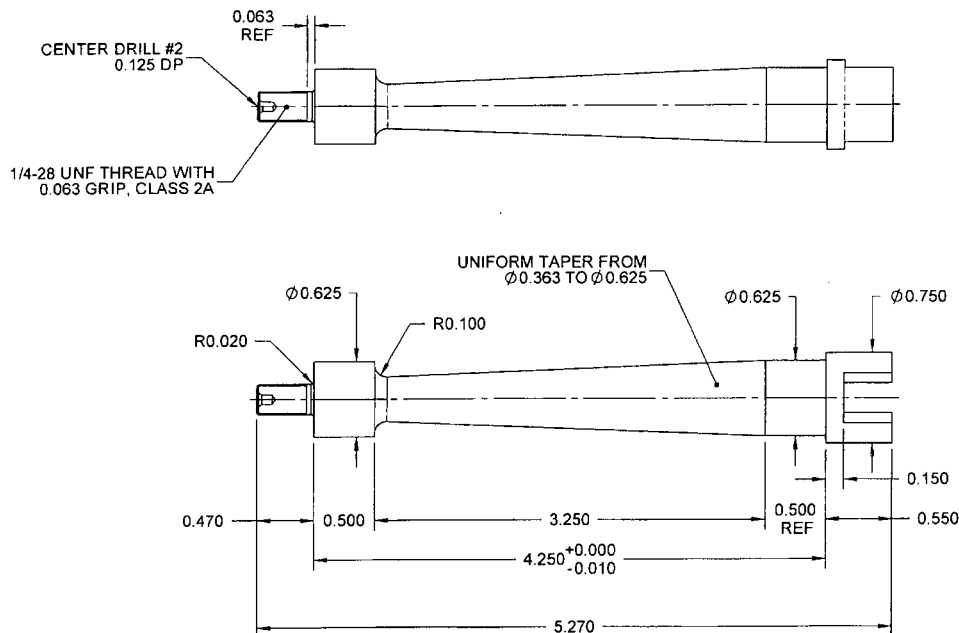
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

REV. E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
REV. D	D3407-1/3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
REV. C	-1/3 LONGER FOR FIT WWASHER	CP	05.09.09
REV. B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
REV. A	NEW ISSUE	CP	05.03.16
DESIGN		BY	DATE
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.23		

**DART AEROSPACE USA, INC.**  
PORT HADLOCK, WA

DRAWING NO. **D3407**  
TITLE **TOW RING**  
REV. E  
SHEET 1 OF 5  
SCALE  
NTS

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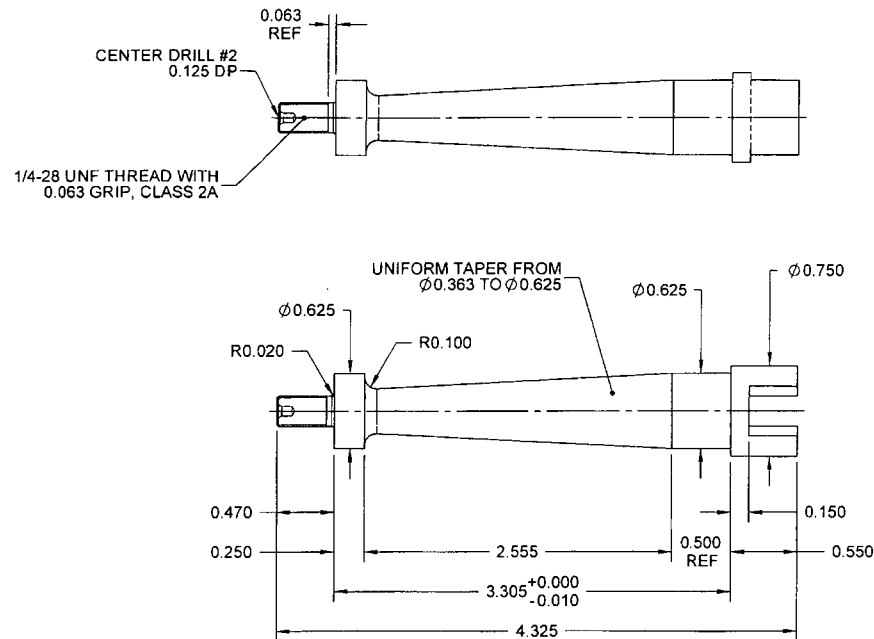
**D3407-1 STEM**

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NO. 71575

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08 07 23

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.33 lbs

DESIGN		<b>DART AEROSPACE USA, INC.</b>	
DRAWN		PORT HADLOCK, WA	
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MFG. APPR.		D3407	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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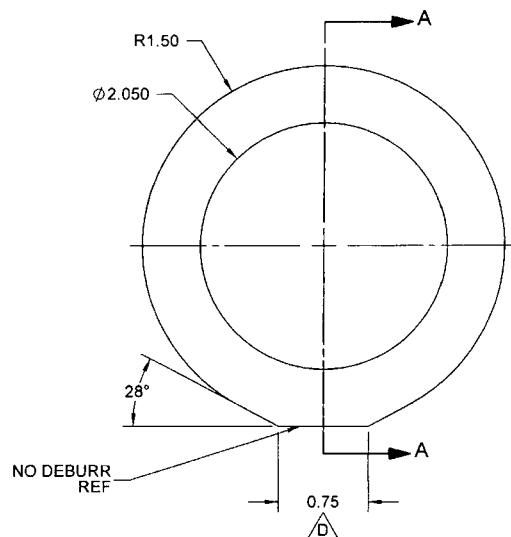
**D3407-3 STEM**

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NO. 71575

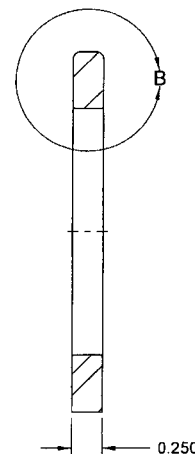
- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.27 lbs

DESIGN		<b>DART AEROSPACE USA, INC.</b>	
DRAWN	<i>JP</i>	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D3407	SHEET 3 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	TOW RING	NTS
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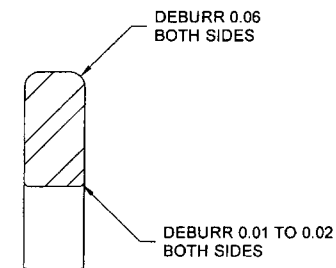
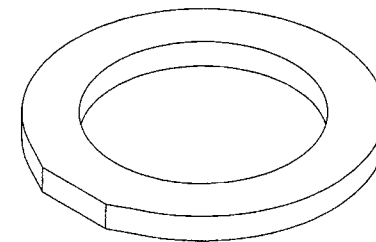
**RELEASED**  
07-06-01 R/P



**D3407-5 RING**



**SECTION A-A**



**DETAIL B  
SCALE 2X**

**RELEASED**  
08-06-01/11/11

- NOTES:**
- 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.27 lbs

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DESIGN	97	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	1/18	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		<b>D3407</b>	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		<b>TOW RING</b>	NTS
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8 7 6 5 4 3 2 1

D

D

C

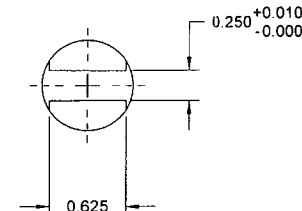
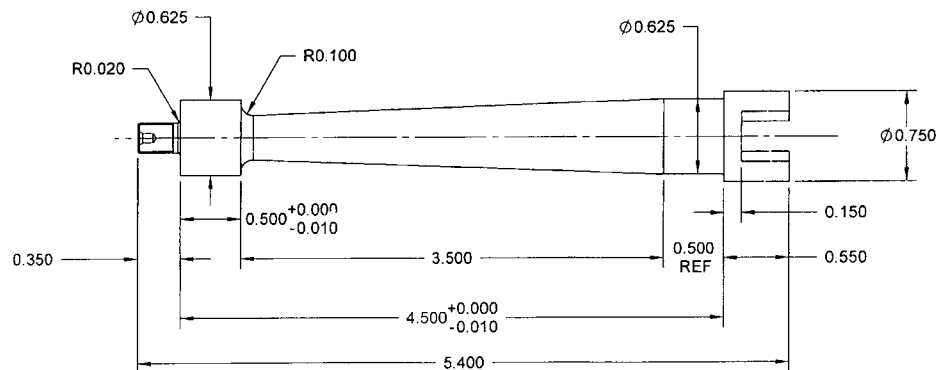
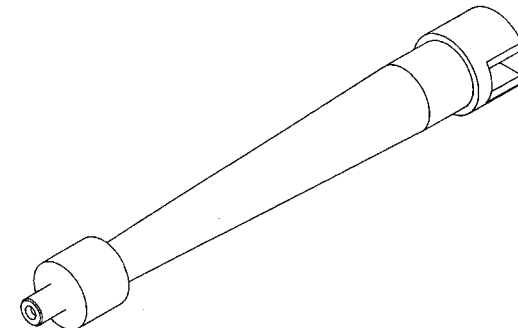
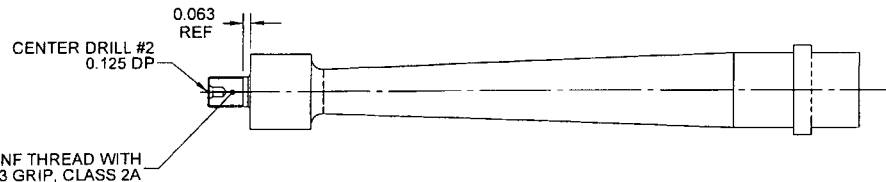
C

B

B

A

A








**D3407-7 STEM**

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NO. 71525

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- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.34 lbs

DESIGN	AJS	<b>DART AEROSPACE USA, INC.</b>	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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8 7 6 5 4 3 2 1